

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/006600

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)  
EPO-Internal, WPI Data, PAJ, BIOSIS, Sequence Search

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 023 171 A (HO STEFFAN N ET AL) 11 June 1991 (1991-06-11)  column 1 - column 2; claims 1-3; figures 1,2	1-9, 12, 22-25, 27-29
X	US 5 512 661 A (SQUINTO STEPHEN P ET AL) 30 April 1996 (1996-04-30) abstract column 11 column 16; figure 2	1-12, 22-29
X	WO 99/16904 A (HOPE CITY) 8 April 1999 (1999-04-08) page 4 - page 6; claims 1-3, 11-21; figure 1A	1-9, 12, 22-29
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*G\* document member of the same patent family

Date of the actual completion of the international search

4 November 2004

Date of mailing of the International search report

18/11/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 183 987 B1 (MELOEN ROBERT HANS ET AL) 6 February 2001 (2001-02-06) abstract; claim 1	13-15, 17-20
X	----- DATABASE EMBL 'Online! EBI; 2 July 2002 (2002-07-02), "Human follicle stimulating hormone alpha" XP002301407 Database accession no. AAU96148 abstract	16
X	----- DATABASE EMBL 'Online! EBI; 8 June 1999 (1999-06-08), "Human chorionic gonadotrophin alpha subunit sequence" XP002301408 Database accession no. AAW99531 abstract	16
A	----- WO 99/58721 A (WHITEHEAD BIOMEDICAL INST ;LANDER ERIC S (US); WANG DAVID G (US)) 18 November 1999 (1999-11-18) page 3 page 7; claim 1; figure 3 -----	1-20, 22-29

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 21  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

Continuation of Box II.2

Claims Nos.: 21

Claim 21 refers to a polypeptide having the activity of the polypeptide according to claim 20. Claim 20, however, does not mention any polypeptide activity. Therefore, claim 21 lacks clarity to such an extent that no search can be carried out.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/006600

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5023171	A	11-06-1991	NONE	
US 5512661	A	30-04-1996	US 5169764 A AU 664975 B2 AU 8396991 A CA 2088990 A1 CZ 9300152 A3 EP 0542892 A1 HU 68259 A2 HU 9500736 A3 IE 912793 A1 IL 99128 A JP 6500016 T LT 1529 A LV 10293 A , B NO 930430 A NZ 239312 A PT 98619 A SK 7193 A3 WO 9202620 A1 ZA 9106270 A	08-12-1992 14-12-1995 02-03-1992 09-02-1992 11-08-1993 26-05-1993 28-06-1995 28-11-1995 12-02-1992 13-08-2000 06-01-1994 25-07-1995 20-10-1994 05-04-1993 27-06-1994 30-06-1992 07-07-1993 20-02-1992 29-04-1992
WO 9916904	A	08-04-1999	AU 9577998 A CA 2303420 A1 EP 1019540 A1 JP 2001518310 T WO 9916904 A1 US 6204025 B1	23-04-1999 08-04-1999 19-07-2000 16-10-2001 08-04-1999 20-03-2001
US 6183987	B1	06-02-2001	AU 720337 B2 AU 4847896 A CA 2223125 A1 EP 0842275 A1 WO 9625496 A1	25-05-2000 04-09-1996 22-08-1996 20-05-1998 22-08-1996
WO 9958721	A	18-11-1999	AU 3984699 A WO 9958721 A1	29-11-1999 18-11-1999